

What is claimed is:

1. A thermoformable nonwoven fabric composed of filaments of a biodegradable polymer comprising a thermoplastic aliphatic polyester as its principal component, wherein the filaments have a polymer supercool index of 0.3 to 0.6.

2. A nonwoven fabric as set forth in claim 1, wherein the biodegradable polymer is selected from the group consisting of poly-D-lactic acid, poly-L-lactic acid, copolymers of D-lactic acid and L-lactic acid, copolymers of D-lactic acid and hydroxycarboxylic acid and copolymers of L-lactic acid and hydroxycarboxylic acid, copolymers of D-lactic acid, L-lactic acid and hydroxycarboxylic acid, and blends of any of these polymers.

3. A nonwoven fabric as set forth in claim 1, wherein the biodegradable polymer is selected from the group consisting of polybutylene succinate, polyethylene succinate, polybutylene adipate, polybutylene sebacate, polycaprolactone and polypropiolactone, and copolymers essentially comprising a base unit of any of these polymers.

4. A nonwoven fabric as set forth in claim 1, wherein the filaments have a birefringence of 3×10^{-3} to 15×10^{-3} .

5. A nonwoven fabric as set forth in claim 1, wherein the filaments have a polymer crystalline size of 15 to 20Å as measured axially thereof.

6. A nonwoven fabric as set forth in claim 2, which has a boiling water shrinkage percentage of 10 to 40%.

7. A nonwoven fabric as set forth in claim 1 ,
wherein the polymer contains a nucleating agent.

- 5 ✓ 8. A method of producing a formable nonwoven
fabric composed of filaments of a biodegradable polymer
comprising a thermoplastic aliphatic polyester as its
principal component, the method comprising the steps of:
 melting the polymer and extruding the resulting
melt through a spinneret and forming said melt into
filaments;
10 drafting the extruded filaments at a drafting
speed of 1,000 to 2,500m/min by means of a suction device
disposed below the spinneret, while quenching the filaments
with quench air blow;
 spreading open each other and accumulating the
15 drafted filaments on a movable collector surface thereby
to form a web; and
 treating the web for formation of the nonwoven
fabric.
- 20 9. A nonwoven fabric production method as set
forth in claim 8, wherein the biodegradable polymer is
selected from the group consisting of poly-D-lactic acid,
poly-L-lactic acid, copolymers of D-lactic acid and
L-lactic acid, copolymers of D-lactic acid and
hydroxycarboxylic acid and copolymers of L-lactic acid and
25 hydroxycarboxylic acid, copolymer of D-lactic acid,
L-lactic acid and hydroxycarboxylic acid, and blends of any
of these polymers.

- 30 10. A nonwoven fabric production method as set
forth in claim 8, wherein the biodegradable polymer is
selected from the group consisting of polybutylene
succinate, polyethylene succinate, polybutylene adipate,
polybutylene sebacate, polycaprolactone and
polypropiolactone, and copolymers essentially comprising a
base unit of any of these polymers.

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